4: WIRING

Definitions:

A & B Sides - If standing between the two units and Facing the unit with the Key, Left is "A" and Right is "B." *(see diagram at right for detail)*

Door Prop function - Monitors Door input for a held open door. Goes into Alarm if door is not closed within 10 seconds, unless another Valid User input is seen.

ACS - Access Control System

Output Relays: *(Output contact rating: 1 Amp)*

Mag Lock Relay - Can be used to control an Electric Lock in response to a Valid User input. Form C *(held 5 sec)*

Alarm Relay - Connect to remote equipment to monitor Alarm conditions. *(Alarms Include: Tailgater, Door Prop, Loiter, and Tamper conditions)* Changes state to indicate Alarm. Form C *(1 second minimum duration)*

"A" & "B" Passage Complete - These relays change state upon valid passage of a user from the A or B side. Used to monitor for Time and Attendance by remote equipment. Form C *(held 1 sec)*

Inputs: *(all Inputs share 2 common GNDs on connector)*

Valid "A" Card - N/O contact from ACS that momentarily closes to indicate a Valid User approaching from the "A" side.*

Valid "B" Card - N/O contact from ACS that momentarily closes to indicate a Valid User approaching from the "B" Side *

** Enable **Free Passage** by shorting input to GND for Valid A or B Card.*

Bypass - N/O contact that enables Bypass when closed. Resets alarm. Same function as Key Switch.

Door - Closed Loop from Door when Door is closed. Optional, used for Door Prop monitoring and enhanced TDS operation.

Power - 12 VDC@ 1A

REMOTE DISPLAY CONNECTOR: Optional.

SETUP and TEST

Switches: (as shown on drawing)

1) **Door Prop Enable** - Turns on the Door Prop function when placed in the ON position.
2) **Beep Disable** - Turns Off the Valid Card beep when placed in the ON position.
3) **Bi-Direction Card Enable** - Allows an A card input to pass in either direction when placed in the ON position.
4) **Card Stacking Disable** - Requires a Valid User to pass, or time out, prior to accepting another card input.

Key Switch on Upper Cover - Use to Bypass the unit *(held)* or to Reset an alarm *(momentary)*.
- Accessory Switch Leads (Red-Common, White-N/O, Blue N/C)

Pushbuttons: (as shown on drawing)

To Calibrate : **Install lower covers. Verify clear beam path. Apply Power. Press Calibrate Button.**

Keep beam path clear until Calibrate LED is ON (up to 60 sec). That's all it takes to set up!

NOTE: If Tamper is enabled alarm may sound if cover is removed.

A & B Card buttons - Press to simulate an A or B - Card input *(respectively)* for test and troubleshooting purposes.

LEDs:

Calibrate : *On* - Calibrated. *Flashing* - Beam interruption or Calibration required. *Off* - During Calibration.

Inputs : Respective LED will illuminate when a closure is seen on any Input *(A Card, B Card, Bypass, Door)*
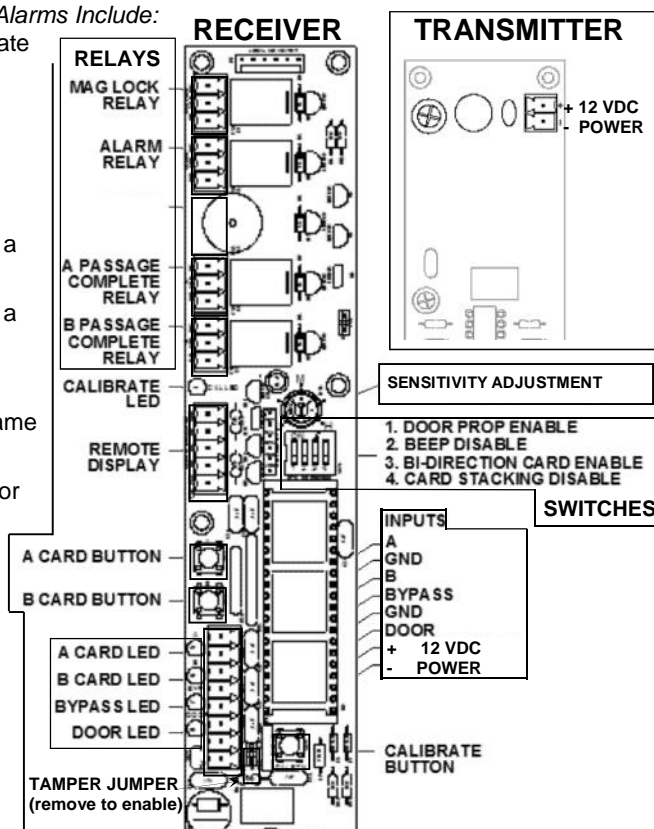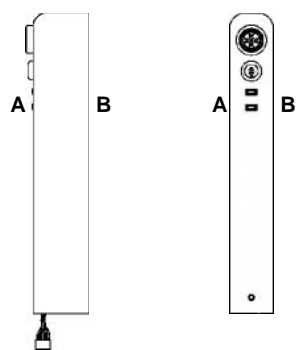
Upper Cover : See **"ES5600 ENTRY SENTRY w/Voice - USER INSTRUCTION"**

Sensitivity: (as shown on drawing)

Clockwise: Increase Sensitivity - Reduce loiter time to 3 sec (min), improved step-over/crawl-under detection

Counter-Clockwise: Decrease Sensitivity - Increase loiter time up to 10 sec, reduce step-over/crawl-under detection
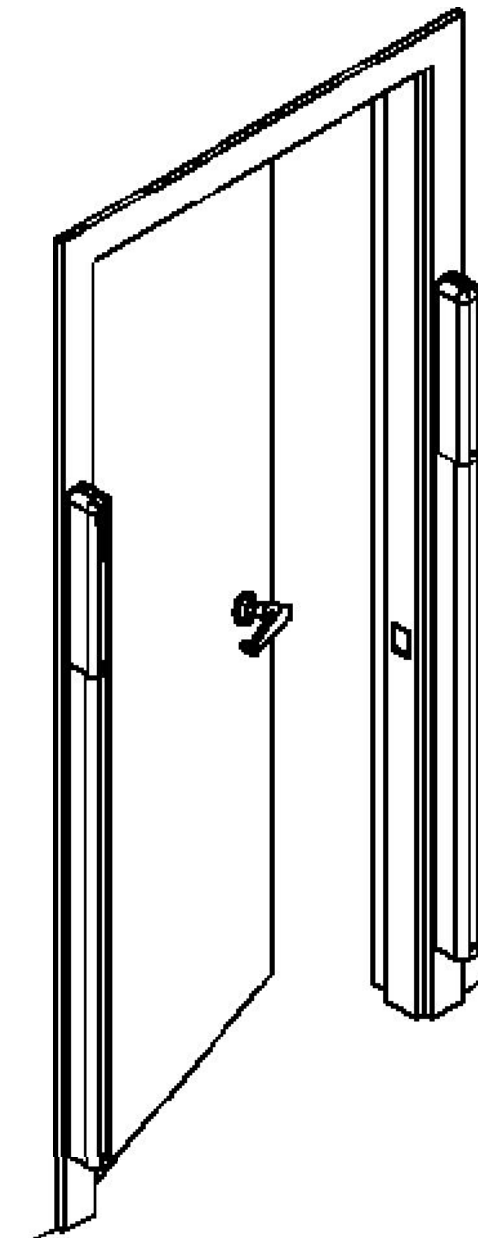

DOOR MNT. **WALL MNT.**

A   B   A   B

RECEIVER

RELAYS
MAG LOCK RELAY
ALARM RELAY
A PASSAGE COMPLETE RELAY
B PASSAGE COMPLETE RELAY
CALIBRATE LED
REMOTE DISPLAY

A CARD BUTTON
B CARD BUTTON

A CARD LED
B CARD LED
BYPASS LED
DOOR LED

TAMPER JUMPER (remove to enable)

TRANSMITTER

+ 12 VDC POWER

SENSITIVITY ADJUSTMENT

1. DOOR PROP ENABLE
2. BEEP DISABLE
3. BI-DIRECTION CARD ENABLE
4. CARD STACKING DISABLE

SWITCHES

INPUTS
A
GND
B
BYPASS
GND
DOOR
+   12 VDC
-   POWER

CALIBRATE BUTTON

(enlarged drawing on insert)

ENTRY SENTRY WITH VOICE

1: CONTENTS
(see detail drawing in Assembly section)

- 1 ea. Receiver assembly
- 1 ea. Transmitter assembly
- 2 ea. Lower Plexiglas covers
- 2 ea. Upper Plexiglas covers
- 1 ea. Hardware Kit
- Installation Instructions (this document)

CLEANING - Soft damp cloth, mild soap solution. Dry with soft cloth. Avoid using paper as this may damage the optical surface. DSI recommends: Chemtronics® ES1668 www.chemtronics.com

WARRANTY

2: PHYSICAL INSTALLATION

Entry Sentry may be mounted both on a door frame, or onto facing walls of a hallway.
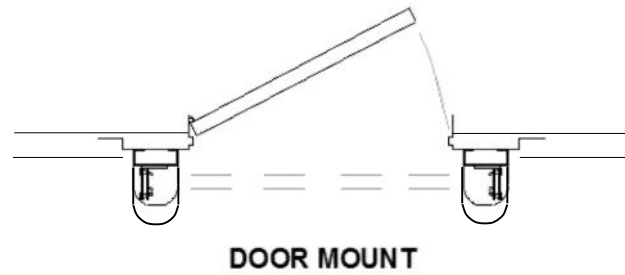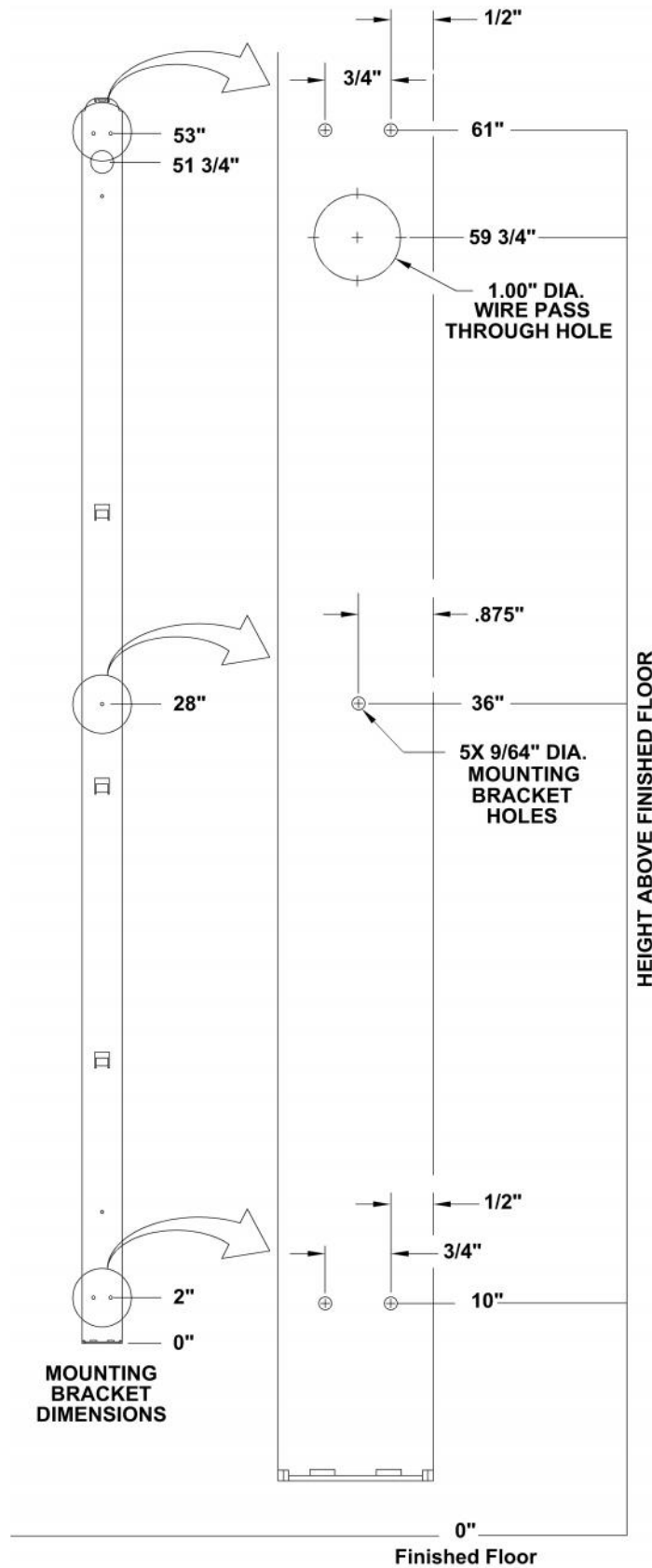
DOOR MOUNT

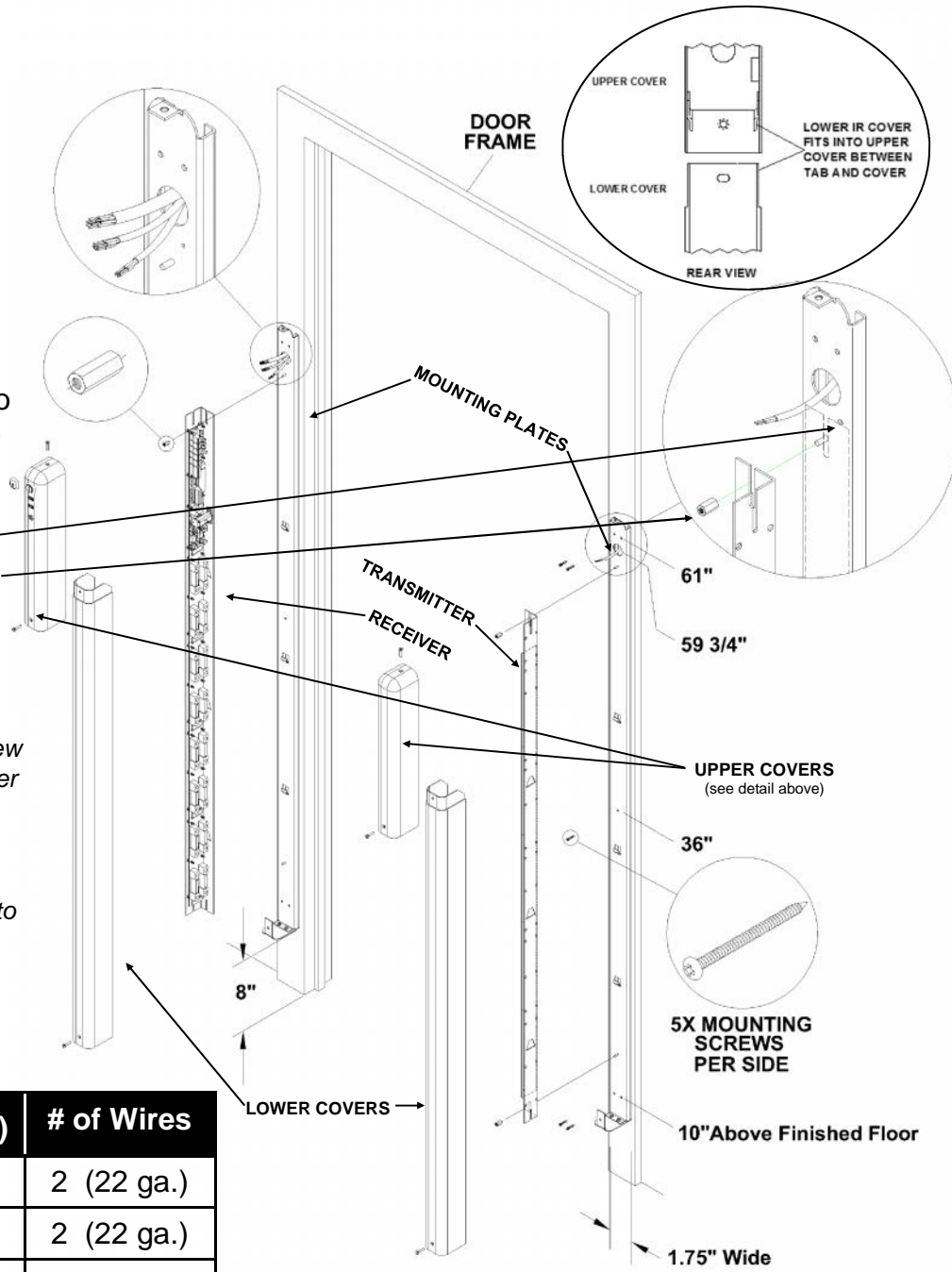Door mount opposite from the door swing.
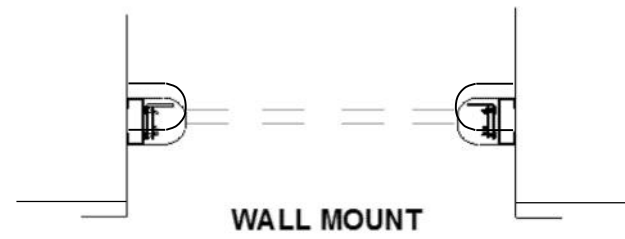
WALL MOUNT

Wall mount on corridor walls.

- See diagram at right for mounting plate detail.

- Plan to hang the Transmitter and Receiver sub-assemblies with LEDs facing across the path of travel. *(Optical Alignment Required: Ë11°)*

- *Separate Electronics from Mounting Plate by removing the 1/4" standoffs from top and bottom of Electronics section.*

- Door/ Hallway Width 30" min. - 80" max.

- Use mounting plate as Template for holes.

- Set base of mounting plate 8" off floor, check for level and plumb.

- Use a punch or scribe to mark the 5 mounting hole locations on surface at 10", 36", and 61" from floor.

- Mark Wiring Hole center at 59 3/4" from floor.

- Set mounting plate aside.

- Drill 5 mounting holes as needed for your mounting surface. *(max. dia. 9/64")*

- Drill a 1" wiring hole.

- De-burr Wiring Hole with file to prevent damage to wiring insulation.

- Install mounting plate using appropriate hardware for your mounting surface.

- Repeat for second mounting plate.

MOUNTING BRACKET DIMENSIONS

1/2"
3/4"
53"
51 3/4"
61"
59 3/4"
1.00" DIA. WIRE PASS THROUGH HOLE
.875"
28"
36"
5X 9/64" DIA. MOUNTING BRACKET HOLES
1/2"
3/4"
2"
10"
0"
HEIGHT ABOVE FINISHED FLOOR
0"
Finished Floor

3: ASSEMBLY

- Pull Wiring through each mounting plate's hole. *(see Connection Planning Table below)*

- **Power**, **Control** and **Monitoring wires** on **Receiver** side.

- **Power wires** on **Transmitter** side.

- Hang **Transmitter** and **Receiver** electronics on each mounting plate so that **LEDs face each other** across the portal that users will pass through.

- Set top of each to **Alignment hole**, then, fasten with a **1/4" Hex Standoff** at top and bottom of each electronics package.

- Install **Lower Covers** and fasten with screws from Hardware Kit. *(Middle screw will be removed after setup to complete Upper Cover installation)*

- Connect **Key Switch/LED Connector** from Receiver Upper Cover *(Red wire to left)*

- Leave **Receiver Upper Cover** off until Wiring and Setup are complete.

DOOR FRAME
UPPER COVER
LOWER IR COVER FITS INTO UPPER COVER BETWEEN TAB AND COVER
LOWER COVER
REAR VIEW
MOUNTING PLATES
TRANSMITTER
RECEIVER
61"
59 3/4"
36"
8"
UPPER COVERS (see detail above)
LOWER COVERS
5X MOUNTING SCREWS PER SIDE
10"Above Finished Floor
1.75" Wide

INSERT WIRES INTO CONNECTOR
CONNECTOR
TIGHTEN SCREW CLAMPS
CONNECTOR DETAIL

CONNECTION PLANNING TABLE	INPUTS (N/O Shared Gnd)		# of Wires
	Valid "A" Card		2 (22 ga.)
	Valid "B" Card		2 (22 ga.)
	Bypass		2 (22 ga.)
	Door Switch		2 (22 ga.)
	Power 12 Vdc @ 1A	Sender	2
		Receiver/Control	2
	OUTPUTS Form C 1 Amp		
	Mag Lock Relay		2
	Alarm Relay		2
	Door Relay		2
	"A" Passage Complete		2
	"B" Passage Complete		2